DNA PHENOTYPING ON ANCIENT EGYPTIAN MUMMIES

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Ancient DNA techniques have enabled the recovery of genomes from individuals who lived hundreds, or even thousands, of years ago. Targeted genome-wide sequencing reads from Egyptian samples over 2,000 years old with <1X coverage were obtained from the European Nucleotide Archive (ENA) [Schuenemann et al. 2017, Ancient Egyptian mummy genomes suggest an increase of Sub-Saharan African ancestry in post-Roman periods. *Nature Communications*, *8*, 15694]. Low-coverage imputation of common SNPs was applied to call genotypes for SNPs present on microarray chips. The Snapshot DNA Phenotyping pipeline was applied to the imputed genotypes to predict eye color, hair color, skin color, freckling, face shape, and global and regional ancestry.